AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings.

Listing of Claims

1. (Currently amended) A method for the allocation of resources in a radio communications system in a state of broadcasting, comprising several stations, at least two of which are not within range of visibility, the method comprising the following steps:

defining a graph of competition between the different stations;

assigning time intervals to each station in making successive passages on all the stations and carrying out the following steps at each passage and for each station:

E is an interval of given time interval numbers;

n is the smallest natural integer that does not belong to the interval E;

(A.1) if it is not the first passage AND if n>Nmax, then no time interval whatsoever is added to the station Si;

(A.2) if it is the first passage OR if n=<Nmax, then n is added to the time intervals assigned to Si;

(B) the loop of the passages is continued on all the stations:

(B.1) if, during a passage, no time interval has been added to any station, then no other passage is made;

(B.2) if, during a passage, at least one time interval has been added, then a new passage is executed.

2. (Original) The method according to claim 1, wherein the interval E corresponds to a combination of the time interval numbers already assigned to a station Si during preceding passages and time intervals already assigned to the stations Sj which are related to Si by a particular relationship known as a relationship of competition.

3. (Original) The method according to claim 1, wherein the graph of the relationship of competition is set up according to the following steps: from a relationship of visibility written as R, a relationship of competition between stations, referenced C, is determined as follows:

two stations Si and Sj are in competition, SiCSj if and only if (SiRSj and (NOT SjRSi))

or

(SjRSi and (NOT SiRSj))

or

(∃ Sk such that SkRSi AND SkRSj AND NOT (SiRSj and SjRSi))

4. (Original) The method according to claim 1, further comprising the following steps:

a) encoding the identifier I of each of the stations, on a number n of bits b1, b2, . . . bn, using two symbols corresponding respectively to a reception state and to a transmission state;

b) for any unspecified station Si, during an attempt to make transmission, starting at a given identification slot;

b.1) for i varying from 1 to n,

b.1.1) if the value of bi is equal to the symbol corresponding to the reception state, the station Si receives during the slot k+i-1:

if the station Si detects a signal sent by another station it considers itself not to be chosen;

if the station Si detects nothing, the station Si continues to scan the bits bi,

b.1.2) if the value of bi is equal to the symbol corresponding to the transmission state, the station transmits during the slot k+i -1;

c) allocating the medium to the station that has performed the step b.2) without receiving the transmission symbol.

5. (Original) The method according to claim 4, comprising a step b.0) preliminary to the step b.1) for the transmission of the transmission symbol by the station Si and wherein the steps b.1), b.1.1), b.1.2) may be carried out on identification slots varying from k +1 to k+n.

6. (Original) The method according to claim 4 using binary encoding and the reception operation "receive 1" when a station detects a signal coming from another station and "receive 0" when it receives no signal and the "send 1" operation when the station transmits a signal in a given slot.

7. (Original) The method according to claim 4, using an identification number taken in an interval [0, N-1] with $N=2^n$.

8. (Original) The method according to claim 1, wherein the broadcasting medium is a radio station and wherein the stations are transmitter-receiver units.

9. (Currently amended) A method for the allocation of access to a ~~broadcasting medium~~ radio communication system in a state of broadcasting by several stations Si, wherein the stations are provided with a digital processing circuit adapted to executing the steps of a method comprising the following steps:

defining a graph of competition between the different stations;

assigning time intervals to each station in making successive passages on all the stations and carrying out the following steps at each passage and for each station:

E is an interval of given time interval numbers,

n is the smallest natural integer that does not belong to the interval E,

(A.1) if it is not the first passage AND if n>Nmax, then no time interval whatsoever is added to the station Si;

(A.2) if it is the first passage OR if n=<Nmax, then n is added to the time intervals assigned to Si;

(B) the loop of the passages is continued on all the stations:

(B.1) if, during a passage, no time interval has been added to any station, then no other passage is made;

(B.2) if, during a passage, at least one time interval has been added, then a new passage is executed.

10. (Original) The method according to claim 9 wherein the interval E corresponds to a combination of the time interval numbers already assigned to a station Si during preceding passages and time intervals already assigned to the stations Sj which are related to Si by a particular relationship known as a relationship of competition.

11. (Original) The method according to claim 9 wherein the graph of the relationship of competition is set up according to the following steps:

from a relationship of visibility written as R, a relationship of competition between stations, referenced C, is determined as follows:

two stations Si and Sj are in competition, SiCSj if and only if

(SiRSj and (NOT SjRSi))

or

(SjRSi and (NOT SiRSj))

or

(∃ Sk such that SkRSi AND SkRSj AND NOT (SiRSj and SjRSi))

12. (Original) The method according to claim 9 wherein the digital processing circuit is adapted for executing the following steps:

a) encoding the identifier I of each of the stations, on a number n of bits b1, b2, . . . bn, using two symbols corresponding respectively to a reception state and to a transmission state;

b) for any unspecified station Si, during an attempt to make transmission, starting at a given identification slot,

b.1) for i varying from 1 to n,

b.1.1) if the value of bi is equal to the symbol corresponding to the reception state, the station Si receives during the slot k+i-1:

if the station Si detects a signal sent by another station it considers itself not to be chosen;

if the station Si detects nothing, it continues to scan the bits bi

b.1.2) if the value of bi is equal to the symbol corresponding to the transmission state, the station transmits during the slot k+i -1;

c) allocating the medium to the station that has performed the step

b.2) without receiving the transmission symbol.

13. (Original) The method according to claim 12 wherein it comprises a step b.0) preliminary to the step b.1) for the transmission of the transmission symbol by the station Si and wherein the steps b.1), b.1.1), b.1.2) may be carried out on identification slots varying from k +1 to k+n.

14. (Original) The method according to claim 12 using binary encoding and the reception operation "receive 1" when a station detects a signal coming from another station and "receive 0" when it receives no signal and the "send 1" operation when the station transmits a signal in a given slot.

15. (Original) The method according to claim 9 wherein the broadcasting medium is a radio station and wherein the stations are transmitter-receiver units.

16. (Original) The method according to claim 9 comprising a station configuration device that is separate from the stations.

17. (Original) The method according to claim 5, using binary encoding and the reception operation "receive 1" when a station detects a signal coming from another station and "receive 0" when it receives no signal and the "send 1" operation when the station transmits a signal in a given slot.

18. (Original) The method of claim 13, using binary encoding and the reception operation "receive 1" when a station detects a signal coming from another station and "receive 0" when it receives no signal and the "send 1" operation when the station transmits a signal in a given slot.